Achyranthes velutina

Common Name(s):

Devils horsewhip

Current Threat Status (2012):

At Risk - Naturally Uncommon

Distribution:

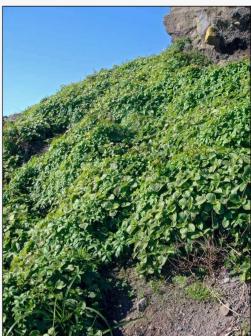
Known in a natural state only from Macauley Island in the southern Kermadec Island group. A. velutina is known from throughout the Pacific. It is A. velutina not A. aspera L. that was recorded once as naturalised from Silverdale in North Auckland in 1960.

Habitat:

Amongst sea bird burrows on the margisn of steep cliffs in association with grasses and sedges.

Features*:

Small, much branched, monoecious shrub. Rootstock stout, woody. Stems somewhat succulent at first, ribbed becoming basally woody with age ribbed, densely covered in velutinous, appressed hairs. Petioles 5-10 mm long, pink, fleshy, velutinous, basal abscission zone evident. Leaves opposite, spreading to decurved, densely clustered toward branch tips, 40-50 x 25-30 mm, dark green, green or purple-grey, margins often, suffused with pink or red, mostly broadly ovate, ovate-orbicular or elliptic; apex blunt to abruptly subacute, sometimes shortly apiculate; base attentuate; lamina fleshy, veins distinct, often purple, upper and lower surfaces silky canescent, margins crenulate to crenate. Inflorescence a terminal erect spike, 150-200 mm long. Peduncle 15 mm long, fleshy, white-villous; spike rachis fleshy, white-villous to purple-villous; flowers bisexual, retrorse, sessile, c. 180-200 per spike, initially spaced at 10 mm intervals this diminishing to < 1 mm intervals toward inflorescence apex. Bracts persistent on rachis, 3-3.5 x 0.5-1 mm, ovate to lanceolate, strongly retrorse, chartaceous, weakly keeled near apex only, pale white, margins entire, apex acute, sometimes with a small 0.1-0.2 mm long pale yellow mucro. Bracteoles 2; abscissing with senescent flowers; 0.2-1 mm long, broadly ovate, chartaceous hyaline, lustrous, pale caramel; margins entire; strongly keeled, keel lustrous, caramel brown, extending well beyond bract as a hardened, channelled, strongly recurved, falcate spine 4-5 mm long. Perianth segments (sepals) 5, lancelate, central portion pale caramel-brown, distinctly pink-tinged, margins pale yellow or off-white opaque, hayline; segments subequal, 4.5-6 mm, channelled. Stamens 4, fused at base, filaments 0.5-1 mm, alternating with 4 narrowly spathulate 0.4 x 0.6 mm white-hyaline, petaloid, fimbriate-margined pseudostaminodes; anthers 0.4-0.6 mm, yellow. Style 0.6-1 mm, pink to pale orange, arising from a fleshy papillate style base 0.8



Caption: Macauley Island, Kermadec Islands. May 2011. Photographer: Peter de Lange



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mm diameter; stigma brown, truncate. Utricle 2-2.5 mm, dark brown, turbinate, chartaceous, surmounted by the dry somewhat woody, style base. Seed 1.2-1.8 x 0.9-1.2 mm, dark chesnut brown, ovoid to ellipsoid.

Flowering:

Fruiting:

Throughout the year

Throughout the year

Threats:

This species is only known from a single natural occurrence in New Zealand, Macauley Island in the Kermadecs. It is under no obvious threat and is apparently a recent example of a natural long distance dispersion with subsequent successful establishment on this island.

*Attribution:

Fact Sheet prepared for NZPCN by P.J. de Lange 1 January 2005. Description from de Lange et al. 92004) - as Achyranthes aspera (see taxonomic notes)

References and further reading:

Barkla, J.W., P.J. Dilks, T.C. Greene and R. Griffiths 2008 *Homalanthus polyandrus* (Euphorbiaceae) on Macauley Island, southern Kermadec Islands, with notes on that island's vascular flora. *New Zealand Journal of Botany* 46: 373–379.

de Lange, P.J., R.P. Scofield and T.C. Greene 2004 *Achyranthes aspera* (Amaranthaceae) a new indigenous addition to the flora of the Kermadec Islands group. *New Zealand Journal of Botany* 42: 167–1773.

Webb CJ, Sykes WR, Garnock-Jones PJ 1988. Flora of New Zealand. Vol. IV. Botany Division, DSIR, Christchurch.

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. Perspectives in Plant Ecology, Evolution and Systematics 2009 Vol. 11 No. 4 pp. 285-309

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http://nzpcn.org.nz/flora_details.asp?ID=723